

Objective 9.9: Reduce nonfatal head injuries so that hospitalizations for this condition are no more than 106 per 100,000 people.

	1988 <u>Baseline</u>	1989	1990	1991	1992	1993	1994	1995	1996	1997	2000 <u>Target</u>
Nonfatal Head Injuries (per 100,000) Total population ICD-9 codes,800-801,803-804,580-854,870-873,925	118	115	110	104	92	90	84	87	79	75	106

Barriers: Lack of perception of risk while participating in sports activities.

Many old playground surfaces need to be resurfaced with impact absorbing material (may be costly).

Non-institutionalized areas where children play, for example, residential backyards with climbing equipment, pose a risk for head injury.

Lack of enforcement of state laws for safety belts, motorcycle and bicycle helmets, and drinking while driving.

Poor specificity of injury data, especially causal information and diagnosis data.

Strategies: Encourage passage of State laws and ordinances requiring all motorcyclists and bicyclists to wear helmets, and all drivers and automobile occupants to wear safety belts or child safety restraints.

Encourage dissemination on and implementation of the National Action Plan for Playground Safety.

Strengthen vehicle requirements to prevent roof crushes and rollovers.

Increase activities directed at prevention of falls from playground equipment; promote construction of impact absorbing playground surfaces.

Promote use of protective gear in sports events.

Objective 9.10: Reduce nonfatal spinal cord injuries so that hospitalizations for this condition are no more than 5 per 100,000 people.

	1988 Baseline	1989	1990	1991	1992	1993	1994	1995	1996	1997	2000 Target
Nonfatal Spinal Cord Injuries (per 100,000) Total population	5.3	3.8	4.4	6.4	3.6	4.7	3.9	4.6	4.8	4.8	5.0
Special Population Target											
9.10a Males (aged 18-24)	9.6	4.7	6.9	9.8	4.8	6.7	7.1	6.9	6.5	6.1	7.1

Barriers: Failure to use protective gear and safety devices.

Lack of perception of risk while doing routine activities such as driving, swimming.

Limited access to trauma care services by under-served populations, especially in rural areas of the country.

Possible cost prohibitions for automobile manufacturers to make design changes compatible with reducing spinal cord injury.

Poor specificity of injury data, especially causal and diagnostic information, lack of enforcement of helmet and belt laws.

Strategies:

Promote passage of State laws that require primary enforcement of safety belts, child occupant restraint systems.

Promote automobile design changes to improve occupant compartment integrity including side-impact protection and energy absorbing interior surfaces.

Establish guidelines for trauma care systems, and encourage development of interventions for rural areas.

Target fall-related interventions for seniors and children.

Promote usage of protective gear in sporting events.

Conduct research of behavioral and environmental modifications that increase the likelihood of rehabilitation after a non-fatal unintentional injury.

Objective 9.11 **Reduce by 20% the incidence of secondary conditions (i.e., pressure sores) associated with traumatic spinal cord injuries.**
 (Revised)

Baseline	2000 Target
None Available	20% reduction

Note: Secondary conditions are defined as conditions causally related to a disabling condition (i.e., occurring as a result of the primary disabling condition) and can be either a pathology, an impairment, a functional limitation, or a disability.

Barriers:	Strategies:
<p>Little is currently known about the incidence and prevalence of secondary conditions (i.e., pressure sores) among persons with traumatic spinal cord injuries. Existing data systems do not contain information about the incidence and prevalence of secondary conditions or the casual factors,</p> <p>Access of certain groups to appropriate care, poor coordination of care phases (i.e., from primary to rehabilitation),</p> <p>Baseline incidence data are needed to assess a 20% reduction in secondary conditions.</p> <p>Technological improvements are needed in the equipment used for seating. There are few community-based systems of care that include behavioral training and strategies for prevention of secondary conditions.</p>	<p>Develop and implement strategies to determine the incidence of secondary conditions and associated risk factors.</p> <p>Conduct research to determine the human and economic consequences of traumatic spinal cord injury and associated secondary conditions.</p> <p>Assist States in the development of data systems to define the occurrence and impact of secondary conditions. These data will be used to develop, implement, and evaluate innovative approaches for the prevention of secondary conditions.</p>

Objective 9.12: Increase use of safety belts and child safety seats to at least 85% for motor vehicle occupants.

Use of Safety Belts and Child Restraints		1988 Baseline	1989	1990	1991	1992	1993	1994	1995	1996	1997	2000 Target
Motor Vehicle Occupants		42%	47%	49%	59%	62%	66%	67%	68%	68%	69%	85%
Special Population Target		48%	---	50%	55%	---	60%	60%	---	61%	---	70%
9.12a Use of child restraint systems among children aged 4 and younger involved in potentially fatal crashes												
<i>Note: Youth Risk Behavior Survey (YRBS) data indicate that in 1992, 34.2% of high school students reported that they "always" used safety belts when riding in a car or truck, 82% wore seat belts "some of the time".</i>												

Barriers:	Resistance of some people to use safety belts and child safety seats.	Strategies:	Encourage passage of primary safety belt laws for States and Indian Reservations; promote education on proper use and benefits of use; develop, implement, and evaluate intervention programs in coordination with enforcement; encourage enforcement of fines for failure to restrain children.
	Loopholes in child safety seat laws in some states.		Establish permanent fitting stations for child safety seats.
	Lack of enforcement of existing safety belt and child restraint laws.		Enforce existing child safety seat laws.
	Most states do not have primary enforcement of safety belt laws.		Promote booster seat give-away programs.
	Misunderstanding by the public that airbags must be used with occupant restraint system to be full effective.		Promote booster seat use among parents of children who have outgrown child safety seats.
	Lack of access to child safety seats by low income populations.		Increase counseling efforts among health care providers.
	Alcohol has been associated with failure to use seatbelts.		Increased enforcement of current occupant laws.

Figure 9.13: Increase use of helmets to at least 80 percent of motorcyclists and at least 50 percent of bicyclists.

Helmets Use	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	2000 Target
	Baseline										
Motorcyclists	60%	60%	60%	62%	---	---	63	---	64	---	80%
Bicyclists	8%	---	---	18%	---	---	---	---	---	---	50%

1997 YRBS data indicate that 21.0% of high school students who rode motorcycles reported "rarely" or "never" using helmets; 88.4% who rode bicycles reported wearing a helmet "rarely" or "never."

Issues:

General societal reluctance to use motorcycle and bicycle helmets although attitudes vary by age, SES, and exposure to multifaceted programs.

Activists movements to repeal existing helmet laws requiring use of motorcycle helmets.

Lack of accessibility due to costs of purchasing helmets for certain groups.

Passage of inadequate bicycle helmet use laws, requiring only young riders to wear helmets.

Lack of coordination among injury practitioners, safety experts and school administrators in an effort to require children to wear helmets when riding bicycles to school.

Injuries resulting from failure to use helmets are under-reported because there is no nationwide injury surveillance system for non-fatal injuries.

Performance standards and educational efforts relate to the use of bicycle helmets, but do not address how roadways can better accommodate bicyclists to prevent the occurrence of a crash.

Although mandatory helmet use laws exist in 15 states and some communities (affecting 42% of children 0-14 years old), these are rarely enforced and/or upheld in court. Recent studies indicate dramatic effectiveness when legislation is enforced.

Strategies:

Implement a multi-agency national campaign to disseminate information on the effectiveness of motorcycle and bicycle helmets in preventing head injuries.

Support helmet design changes and standards that improve performance and acceptability.

Encourage community collaborative efforts to require children to wear helmets when riding bicycles to school.

Encourage manufacturers and retailers to include helmets with motorcycles and bicycles at the point of purchase.

Develop guidelines for bicycle helmet interventions; disseminate guidelines to states for local implementation.

Promote positive role models who ride and wear helmets.

Conduct research to demonstrate the efficacy of health promotion for bike helmet use in the absence of legislation.

Source:

Motorcyclist: National Highway Traffic Safety Administration, Department of Transportation

Objective 9.14: Extend to 50 states laws requiring safety belt use for all ages and universal motorcycle helmet use.

States with Safety Belt and Motorcycle Helmet Laws	1989 Baseline	1990	1991	1992	1993	1994	1995	1996	1997	2000 Target
Universal Safety Belt Use Laws	33	36	41	44	45	48	49	49	49	50
Universal Motorcycles Helmet Use Laws (Laws with conditions for age and position)	22	23	24	24	25	25	25	25	22	50

Data represent jurisdictions with "universal" helmet laws (covering all ages). In 1994 an additional 22 jurisdictions had age specific helmet use laws. The District of Columbia and Puerto Rico have safety belt and motorcycle helmet laws. Several U.S. territories also have safety belt laws.

Barriers:	Strategies:
Lack of understanding about the effectiveness of primary safety belt laws and universal helmet use laws in preventing deaths and injuries.	Encourage passage of primary safety belt laws in states with secondary law.
Lack of awareness that partial or age specific helmet laws hinder enforcement and nullify effectiveness.	Encourage use of safety belts in all sitting positions in all vehicles.
Advocacy of personal rights verses public health and safety; activist groups lobby against the passage of universal helmet laws and/or for the repeal of existing laws.	Implement a national campaign that includes non-traditional partners in the development and dissemination of appropriate materials about the effectiveness of motorcycle helmets.
Lack of media attention to scientific studies demonstrating the effectiveness of helmets in the prevention of head injuries.	Encourage Indian reservations to require usage of safety belts and motorcycle helmets.
Available data on society's costs for motorcycle crash-related head injuries is inadequate.	Provide adequate incentives to states for adoption of safety belt and helmet laws.
Repeal of motorcycle helmet laws in some states; legislators and local policy makers need educational information to assist them in decision making.	Raise awareness of the benefits of safety belt and motorcycle helmet use through the implementation of community-based programs.
Inconsistent enforce of existing laws requiring safety belts and motorcycle helmets.	Routinely evaluate the effectiveness of helmet promotion intervention programs, legislation and policies.
	Acquire better data on the costs of injuries to society caused by motorcycle and bicycle crash-related head injuries.

Objective 9.15: Enact in 50 States laws requiring that new handguns be designed to minimize the likelihood of discharge by children.

Handgun Design Laws to Protect Children	1989 Baseline	1990	1991	1993	1994	1995	1997	1998	1999	2000 Target
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	50

Barriers: Lack of consensus about the most appropriate technical approach to use in the development of safety locks that effectively prevent accidental discharge by children.

Strategies: Research and develop effective technological design features to reduce the risk of unintentional discharge by children, including child-proof safeties/trigger locks and ammunition loaded indicators.

There is no consensus that handgun design changes will be as effective as regulations requiring gun control.

Review and compile current literature, patents, and technological developments into an evaluative report.

Only 17 states currently have legislation designed to prevent discharge of handguns by children.

Encourage community level support for design modifications through community-based organizations.

General public is not aware of the need for safety locks on handguns.

Develop educational materials to promote child safety, and encourage manufacturers and retailers to include these in packaging handguns.

Encourage the establishment of regulatory authority for safety standards for handguns.

Objective 9.16: Extend to 2,000 local jurisdictions the number whose codes address the installation of fire suppression sprinkler systems in those residences at highest risk for fires.

Fire Suppression Sprinkler System Installation		1989 Baseline	1990	1991	1992	1993			2000 Target
Local jurisdictions		700	700	700	700	700	Data no longer available		2,000
Percentage of fires in residential properties equipped with fire suppression sprinklers		2.4	2.6	2.7	2.7	2.6			

Barriers:

New home buyers are not consistently offered the opportunity to have sprinkler systems installed during construction.

Strategies:

Encourage municipal codes that require new family dwellings to include fire suppression sprinkler systems.

Residents at highest risk for home fires often live in sub-standard housing for which the cost of retrofitting would be prohibitive.

Encourage passage of local ordinances to require sprinkler codes retroactively to target high rises, multifamily units, and manufactured housing.

Lack of perceived value of sprinkler systems.

Provide technical assistance to communities interested in passing local ordinances relative to sprinkler systems.

Local building codes often do not require installation of sprinkler systems in new construction or retrofitting existing residential dwellings.

Objective 9.17 Increase the presence of functional smoke detectors to at least one on each habitable floor of all inhabited residential dwellings.

At Least One Smoke Detector Each Floor	1989 Baseline	1990	1991	1992	1993	1994	1995	1996	1997	2000 Target
Smoke detector present in the residence	81%	82%		66%*	86.8%	92.7%				100%

**Data are from the National Health Interview Survey and represent the portion of the people living in apartment and condominiums and report having one or more smoke detectors, and the proportion of people living in town houses or single family homes who report having two or more smoke detectors.*

Barriers:	Strategies:
Lack of perceived value of installation, particularly among residents of low-income units.	Promote modification of Federal regulations to require hard wired smoke alarms with battery backup in construction of new residential units.
Availability of lithium powered 10 year battery is not well publicized; cost can be prohibitive to low income families.	Promote collaboration among multiple community-based programs.
Improper placement of smoke alarms within residences.	Promote nationwide education program to teach the public how to properly place and maintain smoke alarms.
Failure of residents to check battery monthly, change battery when needed, and replace smoke alarm after ten years of use.	Target low income families for distribution and installation of low cost or free smoke alarms.
Residents disconnect smoke alarms because of "nuisance" factor.	Encourage education programs that target young children and older adults (highest risk groups).